non-technical student. But as a means of enforcing the pecuniary view it is without a rival in the field of economic literature. It may therefore be safely predicted that it will, in the long run, exert a powerful influence upon economics instruction, especially when such instruction is intended for students pursuing technical courses.

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The International Harvester Company. Department of Commerce and Labor, Bureau of Corporations, March 3, 1913. 8vo, pp. 384.

Of all the work of investigation done by the government there is probably none more valuable to the economist than the reports of the Bureau of Corporations. Modern business has become so complex that it takes more than the observation of the surface facts to serve as a basis of its interpretation. Many of the vital facts of modern business are secret facts, which are revealed only by the most painstaking investigation. The reports of the Bureau of Corporations bid fair to become the textbooks of the future theorist interested primarily in an interpretation of the business situation in our current era.

The International Harvester investigation was initiated by a resolution of the United States Senate which directed the Department of Commerce and Labor to investigate

> the character and operation and effect upon interstate commerce of the combination or trust organization known as the International Harvester Co. and allied concerns engaged in the production, handling, and sale of farm machinery; the investigation to include an inquiry as to whether the prices and output of such machinery appear to be or to have been controlled and regulated by any particular individual or combination of individuals, by a corporation or otherwise; whether there exists at present a healthy competition between local dealers in farm machinery; and whether the quality of the same is on the average as good as in former years.

The Bureau made the relative rates of profits earned in the various lines of production the basis of its conclusions in regard to the fairness of prices. Appraisals of the various properties were made in connection with the organization of the International Harvester Co. in 1902. These appraisals were used in establishing a book value for the tangible property of the combination. The Bureau revised these book values as shown in Table 18.

The evidence used by the Bureau to support its valuations forms, in the opinion of the writer, the weakest part of the report. The Bureau

frequently adopted the mean between the appraisals of two appraisers whose reports were made to the financiers in charge of the formation of the combination. Argument was frequently presented for a lower valuation and then large sums were arbitrarily added to the Bureau's own value estimates in order to appear liberal. However, the final figures used by the Bureau for the various properties are approximately in the same proportion as the amounts of stock issued to these properties as a consideration for their transfer to the combination. This is perhaps the best reason for assuming that the values taken by the Bureau are relatively correct even if they are not absolutely so, and the main conclusions of the report are sound if the values are relatively correct.

TABLE 18

COMPARISON OF THE APPRAISED VALUES ADOPTED BY THE INTERNATIONAL HARVESTER CO. FOR THE PHYSICAL PROPERTY ACQUIRED FOR 1902, WITH THE VALUES ESTIMATED BY THE BUREAU AND THE STOCK ISSUED THEREFOR, BY COMPANIES

Company	Appraisal Adopted by the International Harvester Company	Value as Estimated by Bureau	Stock Issued for Property and Services	Excess of Harvester Co.'s Appraisal over Stock Issued	Excess of Stock Issued over Bureau's Valuation
Deering	$28,081,514	$16,856,704	$21,314,554	$ 6,766,960	$4,457,849
McCormick	29,461,481	23,490,789	26,262,514	3,198,967	2,771,724
Plano	2,708,982	2,378,119	2,268,603	440,379	109,516*
Champion	3,824,251	3,391,742	3,447,186	377,066	55,444
Milwaukee†	3,000,000	3,000,000	3,000,000	....	....
Total	$67,076,228	$49,117,354	$56,292,857	$10,783,372	$7,175,501
J. P. Morgan & Co.	....	....	2,957,143	2,957,143‡	2,957,143
Expense fund	....	....	750,000	750,000‡	750,000
Total	$67,076,228	$49,117,354	$60,000,000	$7,076,229	....

* Stock issue less than estimated value. ‡ Deductions.
† Excluding $148,197 Milwaukee excess paid for in "cash stock."

After establishing property values the Bureau proceeds to a statement of relative costs and relative profits in the various lines of production. These figures show conclusively that the corporation makes relatively high profits in what are called its monopolistic lines (see Tables 53 to 55). The company holds a monopolistic position in the production of binders, mowers, and reapers, its production in each of these lines being over 75 per cent of the total output in this country. In the lines of wagons, manure-spreaders, disk harrows, hay-stackers, etc., it produces less than 25 per cent of the total output in this country. These constitute its new lines in which a comparatively sharp competition prevails. The percentage of profit for 1911 in these various lines was as follows:

Grain machines	14.4
Grass machines	10.5
Corn machines	19.6
Tillage implements	12.6
Seeding machines	3.2
Engines and motors	12.5
Manure-spreaders and wagons	5.7
Cream separators	17.1
Twine	5.4
Attachments and parts	15.4

In the case of the grain and corn machines the company sells at a comparatively uniform price, while its prices for manure-spreaders and wagons are adjusted to the local competitive situation. For the binder or grain machines the list prices are printed and sent out to dealers and agents. For the more competitive lines the lists are printed with the price column blank so that it may be properly filled to meet the situation which may arise.

As a possible reason for the monopoly in binders the Bureau mentions the comparatively large investment required successfully to prosecute the business. It requires a comparatively large fixed investment in machinery and also a large investment in notes receivable, since these high-priced implements are usually sold on three years' time and the notes are sometimes renewed. This situation suggests some interesting generalizations. Where a small investment is involved in the economic production of a commodity the evidence indicates a tendency toward a lower rate of profit on account of the fact that a monopoly situation tends to develop in industries where a large fixed investment is required for economical production. This is true partly because the large concerns have so much advantage over the small concerns and partly because competitive war between two large concerns of this character is so hazardous that it soon results in terms of peace. The advantages of the large plant are illustrated in the following tables:

TABLE 63

AVERAGE FACTORY COST OF ALL GRAIN-BINDERS AT DIFFERENT DOMESTIC PLANTS OF THE INTERNATIONAL HARVESTER CO. FOR THE YEARS 1910 AND 1911

Plant	Average Cost	Plant	Average Cost
A	$56.30	C	$73.78
B	54.11	D	64.94

TABLE 64

COMPARISON OF THE AVERAGE COSTS OF BINDERS FOR THE INTERNATIONAL HARVESTER CO. AND THE INDEPENDENT MANUFACTURERS REPORTING, FOR THE YEARS 1910 AND 1911 COMBINED

Items	International Harvester Company	Independents
Factory cost	$56.32	$70.83
General and miscellaneous expenses	2.25	5.35
Total	$58.57	$76.18

It is somewhat surprising that the International Harvester Co. finds it profitable to produce binders in factory C. For each machine so produced the loss on factory cost is approximately $17. If the number of machines produced in this inefficient factory were sufficiently large the loss involved would be large enough to yield an attractive income on a new modern plant and it would be profitable to close the smaller plant. It would be entirely possible, however, that the volume of business would not require the larger capacity of the modern plant and hence its construction would be deferred.

The Bureau's data in regard to sales are also of interest in the light thrown on the advantages of size and the results of combination. Table 70 shows the following for days canvassed by salesmen of the International Harvester Co. since its organization:

Year	Days Canvassed
1902	450,039
1903	....
1904	....
1905	273,612
1906	327,622
1907	279,904
1908	276,698
1909	306,131
1910	337,901
1911	366,449
1912	384,093

Let us now compare these data with those shown in Table 72.

It is somewhat unexpected to note from the two tables above that while the formation of the International Harvester Co. resulted in reducing the number of salesmen employed, its selling expense per

TABLE 72

COMPARISON OF RATIOS OF COST, SELLING EXPENSE, AND PROFITS TO SALES BETWEEN THE INTERNATIONAL HARVESTER CO. FOR ITS HARVESTING-MACHINE BUSINESS AND FOUR INDEPENDENT HARVESTING-MACHINE COMPANIES, FOR 1910 AND 1911 COMBINED

	International Harvester Co. Harvesting Machines Only	Four Independent Harvesting-Machine Companies
Cost	56.6	71.0
Selling expense	22.7	19.3
Profit	20.7	9.7

harvesting machine is nevertheless higher than that of the independents. While Table 64 shows that the general and miscellaneous expenses of the independents are larger than those of the combination it also shows, when compared with Table 63, that the chief advantage of the International Harvester Co. lies in the low factory costs of its large plants. Apparently the independents have a more advantageous size for the purposes of a selling organization than the combination has, but their plants are too small to produce economically. An examination of Tables 32 to 35 inclusive will show that notwithstanding the fact that the combination has maintained such an expensive selling organization, its output in its monopolistic lines is a smaller proportion of the total output in the country than in the early years of the combination when it was bringing the independents into the fold. The growth of the independents under a policy of price maintenance in the so-called monopolistic lines indicates that the combination may again be forced to wage a destructive war with powerful competitors and suggests the query whether the policy of maintenance of prices and peaceful relations with weaker competitors must not be a temporary situation to be followed later by important readjustments. The same thing seems to be happening in the case of the Steel Corporation in so far as its relations with the independents is concerned. It seeks to maintain stable prices and a peaceable relation with its competitors, and in following such a policy is gradually losing in its proportion of the total output.

The recent tendency of the various manufacturing companies to produce a full line of agricultural implements is bringing about a sharp competition in several lines such as wagons, manure-spreaders, harrows, stackers, etc., and this competition has been a disturbing factor in the trade. The combination is charged with having made exclusive con-

tracts with all the reliable dealers in many localities for the handling of its own goods. It does not furnish two brands of the same implement to a given dealer but brings its own dealers in competition with one another by furnishing to each a separate brand. This policy wins for the combination in two ways, It stimulates the sellers of its own wares and at the same time tends to exclude the brands of independents.

The Bureau closes its report with a summary of objectionable competitive methods which have been employed by the combination and which are listed as follows:

1. The maintenance of pretended competition in the earlier years of the organization.
2. The common practice of so allotting its brands of harvesting machines as to secure an undue proportion of dealers.
3. Attempted coercion of dealers to handle some lines of the company's products exclusively.
4. Full-line forcing.
5. Use of suggested retail price lists.
6. Use of special and discriminatory prices and terms.
7. Misrepresentation by salesmen regarding competitors.

"Full-line forcing" is a term used to describe the practice of requiring dealers to order new lines of the International Harvester Co. as a condition to retaining the agency of some brand of the company's harvesting machine. This list of objectionable competitive methods is typical of the recent tendency to undertake a governmental restriction of competition in order to maintain what is regarded as fair competition. Business men are developing certain ideals in regard to what is fair competition and those interested in the control of interstate commerce by the government are developing a more extended and somewhat different list of objectionable competitive practices. The practices seem to be objectionable in proportion to their effectiveness in eliminating the competitor.

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The Port of Hamburg. By EDWIN J. CLAPP. New Haven: Yale University Press, 1911. 12mo, pp. xiii+220. $1.50.

It is truly a fascinating tale here told, of the rise of the modern Hamburg, and its close relationship with the development of the modern commercial Germany. Sixty years ago Germany was largely dependent upon England and other foreign nations for her sea traffic. But in